# STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES OFFICE OF CONSERVATION AND COASTAL LANDS Honolulu, Hawaii

180-Day Exp. Date: March 21, 2010

**CDUA KA-3524** 

December 11, 2009

Board of Land and Natural Resources State of Hawaii Honolulu, Hawaii

**REGARDING:** Kūhi'o Highway Roadway Plan;

Subdivision of the 40-acre State-owned parcel 5-6-03:4;

Consolidation & Resubdivision of Bishop Estate-owned parcel 5-7-3:03

APPLICANT: State of Hawai'i, Department of Transportation, Highways Division, 869

Punchbowl St., Honolulu, HI 96813

AGENT: George Nishimura; Nishimura, Katayama & Oki, Inc., 826 Kāheka St.,

Honolulu, HI 96814

LANDOWNER: State of Hawai'i and Bishop Estate

LOCATION: Kūhi'o Highway at Lumaha'i and Waikoko, Hanalei, Kaua'i, between

mileposts 5.0 and 5.17

**TMK:** (4) 5-7-3:3 and 5-6-3:4

AREA OF USE: 900 linear feet

SUBZONE: Limited and General

## **DESCRIPTION OF AREA AND CURRENT USE**

Kūhi'o Highway is believed to have been constructed by the County of Kaua'i circa 1930, and then given to the State of Hawai'i for maintenance and operation.

The project area is on the north shore of Kaua'i at Lumaha'i, between Wainiha and Hanalei Bays (Exhibit 1, Location Map). The highway here is a narrow, 20-foot wide two-lane road with no shoulder. The project area is approximately 900 linear feet, and lies at the 120-150 foot elevation. Makai slopes are vegetated and slope from 45% to

near vertical. There are numerous low concrete rubble masonry walls acting as safety barriers.

The distressed makai edge of the highway exhibits erosion damage, longitudinal cracking of the highway, and damage to the existing CRM walls. **Exhibits 2 and 3** show photos of the damaged sections of roadway.

The actual route of the highway does not line up with the existing easements and rights-of-way at Lumaha'i.

#### **PROPOSED USE**

The overall project addresses repair of approximately 900 linear feet of distressed highway between mileposts 5.0 and 5.17. The proposal will also involve the consolidation and resubdivision of property so that existing easements and rights-of-way can be aligned with the actual built highway.

Much of the overall project will occur in the existing State Highways right-of-way. There are three components to the current phase of the project that will occur outside of the right-of-way and on Conservation District land:

- The repair of 300 linear feet of roadway using reinforced concrete overlain with asphalt paving, railings of reinforced concrete with rock veneer, and a keystone retaining wall system for the embankment. Existing guardrails in other areas will be replaced with new guardrails. **Exhibit 4** shows a profile of a typical section. **Exhibit 5** shows the location of the proposed improvements as well as the new wall alignment.
- The subdivision of the 40-acre State-owned parcel 5-6-03:4. The Department of Transportation (HDOT) proposes that 1.139 acres (currently subject to the existing 20-foot wide easement) be set aside. HDOT will apply to the County of Kaua'i and Land Court for subdivision approval. This is shown as "Parcel 2" on Exhibit 8 (oversized).
- The consolidation and re-subdivision of the Bishop Estate-owned parcel 5-7-03:03. HDOT proposes to purchase 0.390 acres from Bishop Estate and incorporate this into the right-of-way. This is shown as "Parcel 1" on Exhibit 8 (oversized).

The roadway will be rebuilt using reinforced concrete overlain with asphalt paving, railings of reinforced concrete to replace the deteriorating CRM walls, and a Keystone retaining wall system to protect the embankment. Approximately 500 feet of roadway will not need retaining walls. The transition from the rock-veneer concrete to metal guardrail will occur at the Lumaha'i Lookout. The metal railing will be continuous after this for aesthetic purposes.

The makai travel lane will be excavated to build the Keystone retaining wall system. The soils will be removed from the site and replaced with granular soil. The retaining wall system will support a reinforced concrete roadway slab, which will be overlaid with asphalt paving.

The Keystone concrete blocks are lightweight and can be transported over the existing low-capacity bridges. No specialized heavy equipment will be required for construction.

The rock veneer was chosen to reflect the historic character of the highway.

Exhibits 6 and 7 show the proposed end-rail treatments and rock wall veneer.

### **SUMMARY OF COMMENTS**

The application was referred to the following agencies for their review and comment - The Department of Land and Natural Resources Divisions of Conservation & Resource Enforcement, Forestry & Wildlife, Kaua'i District Land Office, Engineering, and Historic Preservation; the Department of Health; the Office of Environmental Quality Control; Kaua'i County Planning; and the Hā'ena-Hanalei Community Association.

In addition, this CDUA was sent to the Princeville Public Library for public review.

Comments were received by the following and summarized by Staff as follows:

## DEPARTMENT OF LAND AND NATURAL RESOURCES

# • Division of Forestry and Wildlife

No Comments

## • Land Division

No comments

## • Engineering Division

The Division confirms that the project is located in Flood Insurance Rate Map Zone X. The Flood Insurance Program has no special regulations in Zone X.

## • Historic Preservation (HPD)

HPD does not believe that historic properties would be affected as prior grubbing and grading had disturbed the land, and as archaeological monitoring has also taken place in the same area and no historic properties or burials were found.

## • HPD History and Culture Branch

OCCL also received comments from another branch of HPD that notes that traditional cultural practices occur in the area, including but not limited to hunting, gathering, and fishing. Medicinal plants might be impacted on the makai side of the highway, and trails for hunting and fishing might be blocked by the retaining wall. HPD

"agrees with the recommendation" that a botanist examine the mauka side of the highway for cultural resources.<sup>1</sup>

## COUNTY OF KAUA'I PLANNING DEPARTMENT

The Project is exempt from the Special Management Area Rules and Regulations.

## **ANALYSIS**

OCCL notified the applicant on October 9, 2009 that:

- 1. The proposed use was an identified land use in the Resource subzone of the Conservation District, pursuant to Hawai'i Administrative Rules (HAR) §13-5-22, P-6, PUBLIC PURPOSE USES, (D-1) Land uses undertaken by the State of Hawai'i or the counties to fulfill a mandated government function, activity, or service for public benefit and in accordance with public policy and the purpose of the conservation district. Such land uses many include transportation services, water systems, communications systems and recreation facilities and P-11 SUBDIVISION OR CONSOLIDATION OF PROPERTY, (C-1) Consolidation and resubdivision into an equal number of lots that does not result in increased density. The final authority to grant or deny the permit rests with the Board of Land and Natural Resources (BLNR).
- 2. Pursuant to HAR §13-5-40, a Public Hearing was not required;
- 3. Pursuant to HAR §13-5-31 *Permit applications*, the permit required that an environmental assessment be carried out.

EKNA Services presented a Final EA for the project in July 2006; HDOT Highways Division published a Finding of No Significant Impact (FONSI) in the Office of Environmental Quality Control's (OEQC) *Environmental Notice* on October 8, 2006.

Notice of CDUA KA-3524 was published in the October 8, 2009 issue of the Environmental Notice.

#### **CONSERVATION CRITERIA**

The following discussion evaluates the merits of the proposed land use by applying the criteria established in HAR §13-5-30.

1. The proposed land use is consistent with the purpose of the Conservation District.

<sup>&</sup>lt;sup>1</sup> These comments were received two weeks after the comment deadline had closed, and were not forwarded to the applicant. OCCL addresses them in our discussion.

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

The project is considered an identified land use in the subject area of the Conservation District; as such, it is subject to the regulatory process established in Chapter 183C, HRS and detailed further in Chapter 13-5, HAR. This process provides for the application of appropriate management tools to protect the relevant resources, including objective analysis and thoughtful decision-making by the Department and Board of Land and Natural Resources.

Staff believes the proposal is consistent with the purpose of the Conservation District as the proposal is within a previously disturbed area.

2. The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur.

The objective of the Resource subzone is to develop, with proper management, areas to ensure sustained use of the natural resources of those areas. The objective of the Limited subzone is to limit uses where natural conditions suggest constraints on human activities. The proposed use is an identified land use in both of these subzones of the Conservation District, pursuant to HAR §13-5-22, P-6 PUBLIC PURPOSE USES.

Staff believes resurfacing the road and installing modern guardrails will not have a negative impact on the sustained use of the area's resources. It is designed to improve public safety, but should not lead to an increase in development pressures. The consolidation and resubdivision will lead to easier management of the area by bringing the right-of-way into alignment with the highway.

3. The proposed land use complies with provisions and guidelines contained in Chapter 205, HRS, entitled Coastal Zone Management, where applicable.

The proposed project is not near the shoreline.

4. The proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community, or region.

Staff believes the proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community or region. The proposal does not change the existing use of the area.

5. The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding area, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

The CRM wall will be covered in a faux-rock veneer that DOT believes is in character with the historical nature of the area.

6. The existing physical and environmental aspect of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, which ever is applicable.

The project area will not be visible from any residential or public recreation areas. It will be visible from the road. The new CRM wall might block some makai views from the road.

7. Subdivision of the land will not be utilized to increase the intensity of land uses in the Conservation District.

The subdivision of land will not have any impact on the identified land uses for the property.

8. The proposed land use will not be materially detrimental to the public health, safety and welfare.

Staff believes the proposed project will not be materially detrimental to the public health, safety and welfare.

## **DISCUSSION**

The proposal involves the repair of approximately 900 linear feet of damaged highway on the North Shore of Kaua'i at Lumaha'i, as well as the consolidation and re-subdivision of property in order to align the highway and the right-of-way.

The first part of the project involves the physical repair of a total of 300 linear feet of roadway using reinforced concrete overlain with asphalt paving, the installation of railings of reinforced concrete covered with a faux-rock veneer, and the installation of a keystone retaining wall system for the embankment. Existing guardrails in other areas will be replaced with new guardrails.

The project includes the subdivision of the 40-acre State-owned parcel 5-6-03:4. The highway currently runs through a twenty-foot wide easement on this parcel. The subdivision of 1.139 acres from this parcel will allow the Department of Transportation to create a new right of way.

A third part of the proposal involves the consolidation and re-subdivision of the Bishop Estate-owned parcel 5-7-03:03. HDOT proposes to purchase 0.390 acres from Bishop Estate and incorporate this into the makai edge right-of-way.

Subdivision is being requested in order to bring all portions of the reconstructed highway into the right-of-way. It will not result in a change of actual or potential land use.

The environmental assessment for the project was given a Finding of No Significant Impact (FONSI) on October 8, 2006 by the State Department of Transportation Highways Division.

OCCL received comments after the public comment period had closed which noted that traditional cultural practices occur in the area. These include but are not limited to hunting, gathering, and fishing. Medicinal plants might be impacted on the makai side of the highway, and that trails for hunting and fishing might be blocked by the retaining wall. The commenter "agrees with the recommendation" that a botanist examine the mauka side of the highway for cultural resources.

OCCL notes that the flora study contained in the Final EA found no indigenous plants beyond hala and naupaka. While both can be used for cultural practices, neither are rare or endangered. OCCL can find no evidence that any trails will be blocked by the repair of the CRM wall or the guardrails. As the highway has been in existence since 1930, OCCL does not believe that traditional cultural practices will be impacted by its repair.

OCCL does concur that repairing gaps in the CRM wall might remove visual cues that hunters and fishermen use to locate informal mauka and makai access points. OCCL is confident that cultural practitioners will be able to identify new visual cues in the area.

The DOT has chosen to use a faux-rock veneer in order to reduce the visual impact of the wall and to maintain the historic character of the highway. DOT states that this was chosen "in conformance with the desires of the community." OCCL has no objections to the veneer, though we are not convinced that fake rock maintains historic character.

The bridges on the Hanalei side have an 8-ton maximum weight limit, which restricts the delivery of construction equipment and materials to the site. The current proposal takes this into consideration, and does not require modifications to any of the bridges.

The proposal will not affect the capacity of the highway.

After careful analysis of the project, staff believes that the proposal has the potential to improve public safety, and that it will have a negligible effect on environmental, social, and cultural resources.

### **RECOMMENDATION:**

Based on the preceding analysis, Staff recommends that the Board of Land and Natural Resources APPROVE this Conservation District Use Application (CDUA) KA-3524 to conduct roadway improvements along Kūhi'o Highway between mileposts 5.0 and 5.17 at Lumaha'i and Waikoko, Hanalei, Kaua'i; to subdivide parcel 5-6-03:04; and to consolidate and re-subdivide parcel (4) 5-7-03:03; subject to the following conditions:

- 1. The applicant shall comply with all applicable statutes, ordinances, rules, regulations, and conditions of the Federal, State, and County governments, and applicable parts of the Hawaii Administrative Rules, Chapter 13-5;
- 2. The applicant shall comply with all applicable Department of Health administrative rules;
- 3. Any work done or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with construction plans that have been signed by the Chairperson, and, unless otherwise authorized, shall be completed within three (3) years of the approval. The applicant shall notify the Department in writing when construction activity is initiated and when it is completed;
- 4. Before proceeding with any work authorized by the Board, the applicant shall submit four (4) copies of the construction and grading plans and specifications to the Chairperson or his authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three (3) of the copies will be returned to the applicant. Plan approval by the Chairperson does not constitute approval required from other agencies;
- 5. All best management measures set forth in the application materials are incorporated as conditions of the permit;
- 6. The applicant understands and agrees that this permit does not convey any vested rights or exclusive privilege;
- 7. In issuing this permit, the Department and Board have relied on the information and data that the applicant has provided in connection with this permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
- 8. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the applicant shall be required to take the measures to minimize or eliminate the interference, nuisance, harm, or hazard;
- 9. Should historic remains such as artifacts, burials or concentration of charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact HPD (692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary;

- 10. Other terms and conditions as may be prescribed by the Chairperson; and
- 11. Failure to comply with any of these conditions shall render this Conservation District Use Permit null and void.

Respectfully submitted,

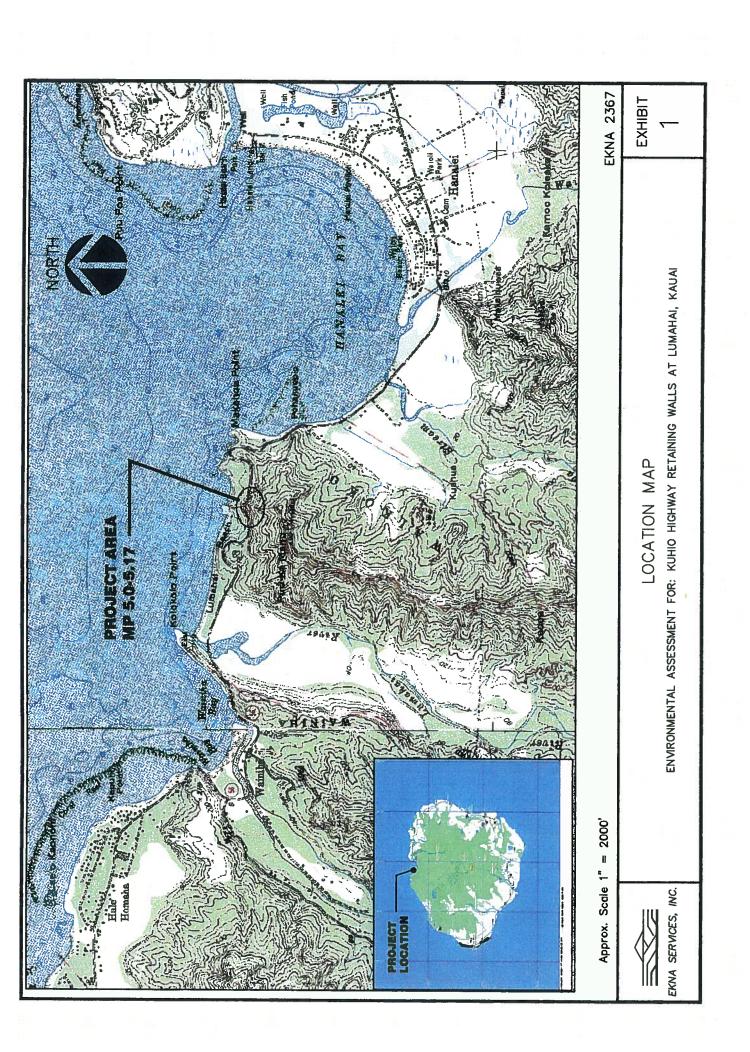
Michael Cain, Staff Planner

Office of Conservation and Coastal Lands

Approved for submittal:

Laura H. Thielen, Chairperson

**Board of Land and Natural Resources** 





View from MP 5.05 towards Lumahai Lookout



View from MP 5.01 at turnout area



PHOTOS — VICINITY OF MP 5.01 TO 5.05 ENVIRONMENTAL ASSESSMENT FOR: KUHIO HIGHWAY RETAINING WALLS AT LUMAHAI, KAUAI

EXHIBIT

2



View of undercut section of highway at MP 5.12



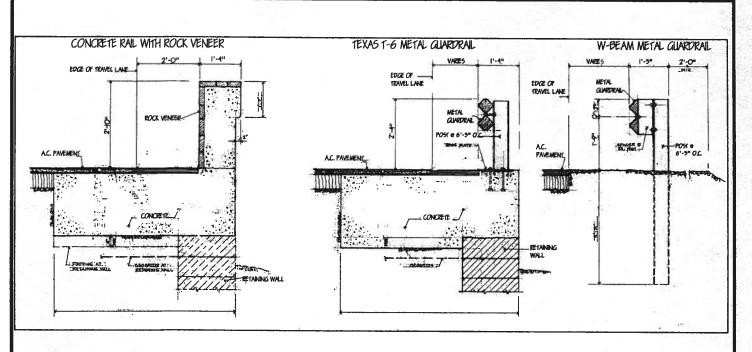
View from MP 5.12



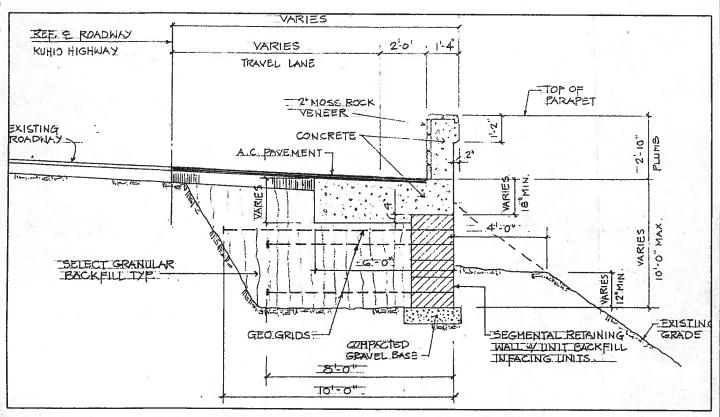
PHOTOS - VICINITY OF MP 5.12

ENVIRONMENTAL ASSESSMENT FOR: KUHIO HIGHWAY RETAINING WALLS AT LUMAHAI, KAUAI

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Railings - Typical Sections



Keystone Retaining Wall System - Typical Section

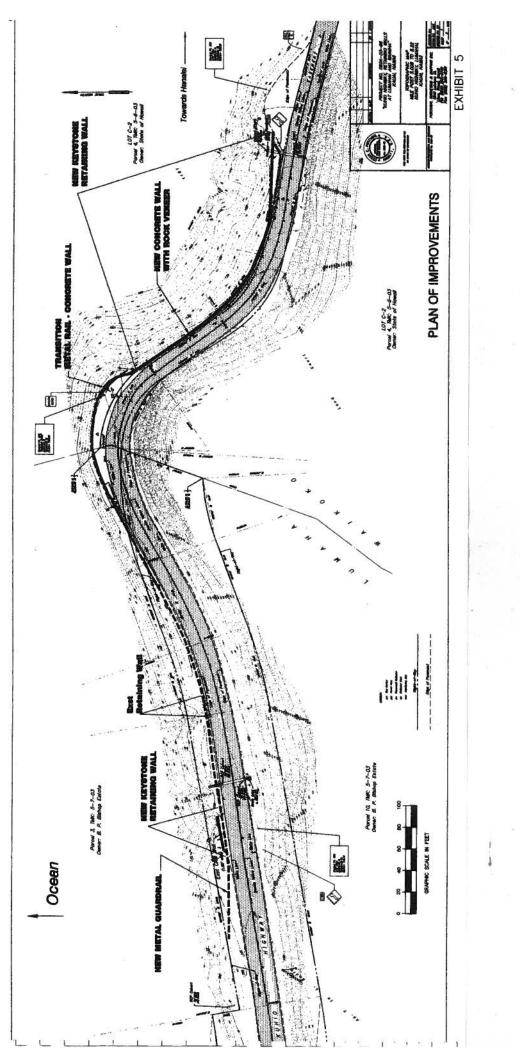


CONCEPT PLAN FOR HIGHWAY REPAIR
TYPICAL SECTIONS

ENVIRONMENTAL ASSESSMENT FOR: KUHIO HIGHWAY RETAINING WALLS
AT LUMAHAI, KAUAI

EXHIBIT

4



FLEAT 350 Terminal

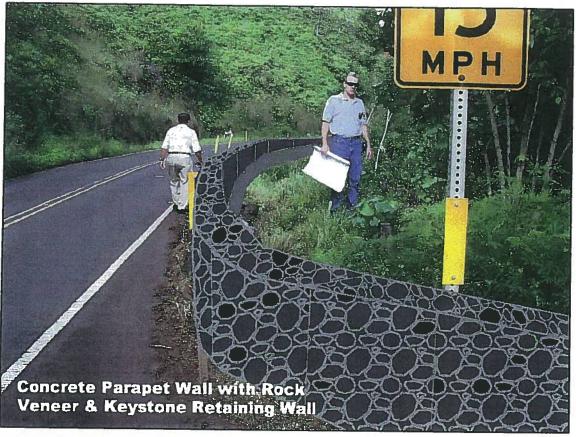


QuadGuard Crash Cushion System



Typical railing end treatments that must be used if termination is less than 13 feet from the edge of the roadway (white line).





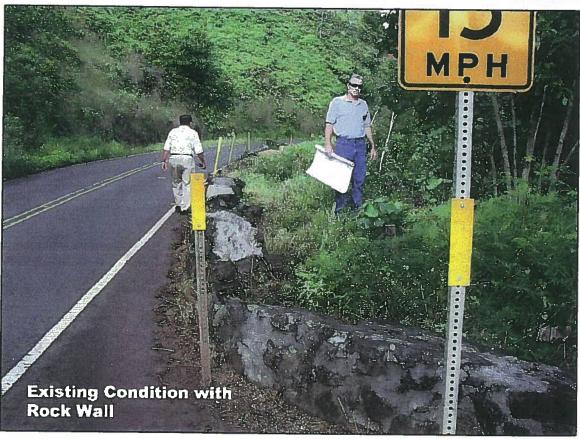




PHOTO RENDERING OF PROPOSED RAILING CONCRETE WALL WITH ROCK VENEER

ENVIRONMENTAL ASSESSMENT FOR: KUHIO HIGHWAY RETAINING WALLS AT LUMAHAI, KAUAI

**EXHIBIT** 

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